

IPC
Innovative, Industry-Leading Communication Solutions Tailored for the Global Financial Markets



Introduction

For nearly 5 decades, IPC has provided industry-leading trading communications solutions and managed network services focused exclusively on the global financial markets. We have distinguished ourselves over the years through superior service delivery, 24X7 direct world-class customer support, disciplined investment in R&D, constant innovation and building a community that offers near-universal access to every type of financial firm, asset class and trading protocol. Here's what makes IPC's portfolio of solutions superior to every other offering in the marketplace:

- World's Leading Financial Community
- Industry Recognition
- Feature-Rich High-Touch Trading Communications
- Innovation
- Advanced Tools, Integrations and Market-Leading Partnerships

These key differentiators are explored in greater detail below:



Unparalleled, Industry-Leading Financial Ecosystem that is both Large and Diverse

At IPC, we understand the power of community and the core role of our platform in facilitating communities within our ecosystem. Our mindset is to be the connector, and to help clients do their business better, by bringing them access to a wider community.

IPC has built one of the largest, dedicated and secure communities of financial markets participants and market leading trading communications systems deployed globally. Our community encompasses sell-side firms such as large dealer banks, investment banks, universal banks, brokers and prime brokers as well as a diverse range of buy-side firms including asset managers, pension funds, sovereign wealth funds, foundations, endowments, corporate treasuries, wealth management firms, hedge funds, funds of funds, commodity trading advisors, private equity firms, and insurance companies. The IPC ecosystem also consists of key intermediaries such as inter-dealer brokers who facilitate transactions between sell-side firms as well as energy brokers and trading firms that intermediate between energy producers and consumers. Additionally, many of the dealer banks in the IPC community have large asset management divisions that cater to the needs of institutional and wealthy individual clients.

Key Attributes of this Ecosystem

- One of the largest financial ecosystems in the world
- Purpose-built ecosystem service capabilities dedicated to the financial markets
- Based on openness and an "API First" design philosophy the adoption of open standards provides flexibility and enables futureproofing
- 7000+ interconnected market participant locations
- 110,000+ trader positions
- 5000+ buy-side firms and 2000+ sell side firms
- 150 providers of various trade lifecycle services including 75+
 liquidity venues (exchanges, alternative trading systems, multilateral
 trading facilities, electronic communication networks, dark pools and
 systematic internalizers); trade lifecycle service providers include order
 management systems, execution management systems, portfolio/risk
 management systems, market data providers, clearing and settlement
 services, trade repositories as well as independent software vendors
- Industry's Leading Trading Communications System:
 - » 100,000+ Unigy desktops
 - » 2000+ trading floors
 - » 80% of top 50 global banks on the Unigy platform
- 24X7 direct follow-the-sun world-class customer service

Unrivalled Industry Recognition

Our firm, our ground-breaking partnerships and our flagship solutions – Unigy and Connexus Cloud – have won over **50 awards** in the last 4 years. This includes being named:



Best Trading Floor
Communication System
Provider for our Unigy solution
16 consecutive times in the
prestigious Waters Rankings,
breaking IPC's own record for
most wins in a single category
in the awards program's 19year history



Best-Cloud Based Trading
Environment, Best CloudBased Platform for Trading
Applications and SaaS
Innovation of the Year in the
TradingTech Insights Awards
and SDC Awards

TradingTech Insight
Awards 2021 USA

Best Cloud Platform for Trading Applications

Best Cloud Platform for Trading Applications

Best Cloud Platform for Trading Applications

Best in Artificial Intelligence in several awards programs including the 2020 Markets Choice Awards

Choice Awards

CARKETS CHOICE AWARDS

2020 WINNER BEST IN AI BLOTTER APP PC & Greenkey Technologies

Best Cryptocurrency
Information Source for our
Connexus Cloud platform
in both the 2020 and 2021
FinTech Breakthrough Awards
demonstrating innovative
technology to empower
trading in new and emerging
asset classes



Our partnerships with OpenFin (operating system of Finance), GreenKey (speech recognition and natural language processing platform) and United Makgroup (IPC's channel partner in the UAE, Bahrain, Kuwait, Oman, and Qatar) have received accolades from the industry multiple times.

Secure, Reliable, Compliant, Feature-Rich High-Touch Trading Communications

The ability to trade **anytime**, **anywhere**, **from any device** – in a secure and compliant manner – is an enormous competitive benefit in the ever-changing global financial markets. IPC enables this by combining the power of a subscription-based, evergreen model with an ever-growing and evolving networked community of global financial markets participants to create a powerful and market-leading value proposition for our clients.

Our suite of solutions empowers traders to securely and compliantly trade on the device of their choice. Users can compliantly trade or communicate with regulated users anytime, anywhere via the IQ/MAX Touch financial terminal, Pulse, Windows soft client or iOS/Android mobile phones. These solutions are particularly important for trading products that are illiquid (thinly traded), heterogeneous or non-standardized. Block trading also benefits from solutions that are performance-engineered for high-touch communications. IPC's portfolio of solutions that enables secure, compliant communications anytime, anywhere from any device include:

Uniqy®

The flagship solution has been recognized globally for years as the industry's best trading communications platform. It is a widely adopted, secure, compliant, end-to-end solution purposebuilt to address the specific needs of the global regulated financial markets community. Unigy has experienced dramatic and robust growth in installations over the years and seamlessly interoperates with Connexus Cloud, IPC's global financial ecosystem. Uniqy can be delivered as an on-premise subscription service or can be wholly managed by the customer offering both physical and soft end-user interfaces. These solutions and flexible deployment options enable our customers to rapidly adjust to today's "work from anywhere" requirements.



Unigy is now easier to use and features multiple access methods to provide an enhanced end-user experience. Traders and regulated users can flexibly communicate through physical devices such as the IQ/MAX Touch financial terminal and Pulse whether at the office or remotely from anywhere around the world. The recently launched <u>Uniqy Soft Client</u> and <u>Uniqy Mobile Client</u> further empower users to seamlessly transition from location to location while remaining always connected, secure and compliant. This anytime, anywhere any device capability provides the maximum flexibility for hybrid working and return to office optionality. Firms have the option of continuing to manage their Uniqy environment while also enjoying these new end-user access options. Alternately, firms can choose to move to our full cloud SaaS model Connexus Unigy. To learn more about Connexus Unigy, also view our Q&A.



Connexus Unigy is a private SaaS offering embedded in Connexus Cloud that provides enterprises of all sizes with an unparalleled capability for flexibility while retaining control and continuity of experience for users. It is a dedicated private cloud delivery of the industry's leading platform which facilitates compliant trader and regulated user communications, enterprise ecosystem integration, high touch and low touch enablement. Attributes include:

Remote and on-site product suite for any BAU, BCP, Mobility and WFH requirement

- Flexible options for deployment and connectivity
- Users remain secure and compliant regardless of device or location
- Device and application options for every user type traders and regulated users

Other services include:

- Voice recording
- TV Audio
- Enterprise integrations interoperability with leading enterprise and financial industry-specific chat and communications platforms, PBX and UCaaS providers and NLP engine

Consuming Connexus Unigy on a subscription provides all the well-proven benefits of software-as-a-service. Adopting a cloud-native environment gives subscribers comfort that they to only pay for what they need but can also expand and consume more as they grow. It's also about the future-proofing and reassurance provided

by evergreen technology that's seamlessly updated and upgraded in the background, with new delivery channels, access mechanisms and markets added and available ondemand.

Connexus Unigy embraces a Single Tenant operating model with the environment fully dedicated to the customer rather than shared across multiple customers. Multi-Tenant SaaS deliveries are very common for widescale 'retail' or B2C type applications whereas Single Tenant is much more common for complex B2B scenarios. A Single Tenant model provides significant benefits when it comes to security, performance guarantees, customization, localization and governance all of which are integral to the Connexus Unigy design, support and SLA. These advantages are described in greater detail below:



Advantages

Security

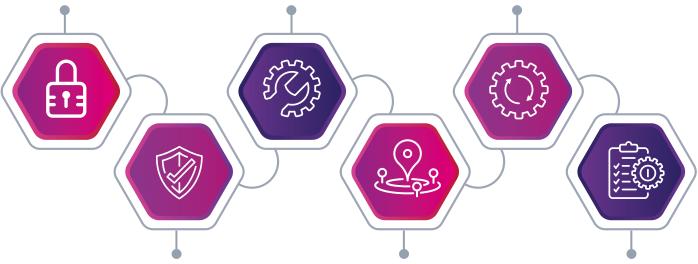
A single customer and a single service is often contained on secure hardware being used by a limited number of people. This helps prevent Denial of Service attacks or misconfigurations causing data leakage or cross talk.

Customization

Control over the entire environment allows for customization and added functionality, if desired. This is especially important where specific integrations for Voice Recording, Analytics, or CRM are required by the customer.

Continuity

Single tenant environments are only upgraded with coordination whereas Multi-Tenant systems are continuously upgraded, often with new features that are not needed by a specific client or to make changes to workflow that may not be welcome. This can cause challenges or discontinuities in User Experience and Trader workflow.



Dependability

With an entire environment dedicated to one client, resources can be built to spec to be available anytime. This also allows for different SLA levels depending on design and directly tied to performance guarantees.

Localization

Resources and databases can be located where needed instead of where the Multi-Tenant system happens to be built. This better addresses regulatory situations where in country data is mandated as well as minimizing latency.

Governance

Customer has control over the environment in terms of operational support to dictate or refuse change windows, enact change freezes, approve triage, request restoration or failover of services. In essence, this is the client's environment but operated by IPC.

Connexus Unigy Express®

Connexus Unigy Express is a private cloud-based dedicated instance of the Unigy platform that is specifically designed to bring the power of Unigy to market participants who historically found the economics of a professional voice trading platform out of reach. The solution is embedded in the Connexus Cloud and provides unparalleled counterparty access with frictionless end-user consumption. It offers the same advantages and features as Connexus Unigy for enterprises with fewer users.



Bringing the power of Unigy to smaller user groups

IQ/MAX® Touch



Touch Screen, multitasking financial terminal dedicated to the needs of the most demanding traders and trade support staff. Developed after conducting extensive focus groups and running customer advisory boards, the IQ/Max Touch turret delivers a flexible and customizable user interface capable of running both native and 3rd party applications in order to satisfy the most complex and proprietary workflows.

Pulse[®]

Delivers dynamic intercom, dial tone, hoots and private wires to traders and all regulated users through an extensible touch screen user interface. This is an ideal solution for anyone who touches the trade lifecycle that needs to communicate with traders or other off-floor users. The solution enables regulated users to leverage the same platform – Unigy – that is designed for mission-critical communications when communicating with traders or each other.



Unigy® Soft Client

Ensures access to markets and counterparties by extending the full functionality of the industry-leading IQ/MAX Touch Turret to the desktop of any PC.

- Completely redesigned with infinitely resizable application window
- Aligns User Experience with IQ/MAX Touch making it easier for users to seamlessly move between hard and soft devices wherever they are
- Leverages exact same resources to provide a true free seating capability supporting existing voice recording, CRM, transcriptions and any other integrations
- Certified by Citrix as Citrix-Ready, Unigy Soft Client is optimized for real time communications in a Virtual Desktop Infrastructure (VDI); allows for flexible deployment models to meet diverse customer requirements
- Simultaneous Dual Talk Path and Dual Handset Support
- Integration with local Microsoft Outlook contacts
- Accessible via a thin client desktop application or a browser; the thin client brings significant advantages such as easy & rapid deployment, enhanced security, increased productivity, simplified management and cost savings.

Unigy® Mobile Client

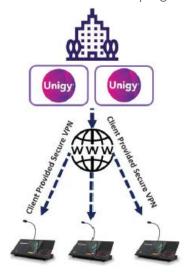
- Optimized for smaller screens of iOS and Android Mobile devices Unigy in your pocket!
- Provides access to all of your critical resources from your iOS or Android mobile device.
- Allows users to leverage existing resources and enables enterprises to be confident that voice trading remains compliant and efficient.
- Supports all Lines, Contacts and Speakers available on Unigy platform
- All edits/changes synchronized with IQ/MAX Touch Turret and Unigy Soft Client for Windows
- Application works in background when not being viewed
- Enables mobile voice recording
- Integration to the local directory of your mobile device





Remote Devices

Our Remote Devices leverage the flexibility of the Unigy Platform to enable traders and regulated users to maintain business continuity when they are unable to access their primary location. During emergencies, customers can remain confident that their traders and trade support staff can continue to work with minimal negative impact. With full Voice Recording capabilities, firms can now ensure their remote users remain compliant without sacrificing any features or functionality. Remote Devices can be deployed before or during an emergency situation, allowing customers to be ready for any unforeseen situation by enacting their BCP scenarios on-demand. Users can access all of their Unigy resources via a customer-provided, secure VPN connection. There is no need to notify partners or counterparties of new numbers or reprogram any buttons.



Connexus® Cloud

Connexus Cloud powers the connectivity for our communications services. The scaled, secure private cloud delivery and expansive network community provides **unified access** and creates a significant competitive differentiation vis-a-vis other network solutions. In a nutshell, Connexus Cloud is a multi-cloud platform for the global financial markets, an ecosystem that interconnects more than 7,000 diverse capital market participants. The Connexus Cloud suite of mission-critical managed solutions includes services such as:



Connexus® Extranet - private cloud extranet service optimized for performance



Connexus® Ethernet - latency-sensitive ethernet service



Connexus® WAN - enterprise connectivity for voice, video and data applications



Connexus® Voice - fully-resilient, SIP-enabled service



Connexus® Chrono - clocking and regulatory timestamping service



Connexus® Cloud Connect - private network connectivity with access to over 550 public clouds

Innovation

Innovation is at the heart of everything IPC does.

Artificial Intelligence and Natural Language Processing

The most distinctive and differentiating example is our innovative work in the artificial intelligence (AI) and natural language processing (NLP) space. IPC enables clients to leverage NLP on real-time voice transcriptions. Chat can provide additional data that can quickly be integrated into the trader workflow. Blotter, our pioneering data visualization tool enables financial market participants to convert their OTC voice quotes into a structured data feed. Blotter enables users to voice populate forms and applications on their desktops through dictation. Compliance workflows are also accelerated, as Blotter allows users to search through structured data to reconstruct trades instead of manually listening to audio files.

Our Dictation as a Service brings together our cloud-based speech recognition and natural language processing engine with the Connexus Cloud financial ecosystem. The service enables traders to "dictate" trade jargon via a dedicated IPC private wire, and consume the output transcribed in real-time via Blotter.

Utilizing the Blotter application, Dictation as a Service provides a powerful, industry-first end-user solution for converting unstructured voice trade data into a searchable, exportable structured data format in real-time (digitized voice). Dictation as a Service provides a simplified way to integrate NLP while Connexus Cloud provides the infrastructure to scale.



Next-Generation Portal

The IPC Portal is an innovative, unified resource that removes complexity for customers and partners utilizing the flagship Connexus Cloud and Unigy solutions. Powered by advanced analytics, the modernized IPC Portal serves as a one-stop-shop to help customers and partners and is integral to all future product and service enhancement efforts.

Among many other dynamic features, the Portal provides:



Connexus Labs

Connexus Labs enables customers to test and evaluate how third-party products, services & applications can be integrated with the IPC product portfolio. It has been specifically designed for IPC customers to support the deployment of new

technologies without the need to invest in building out the required infrastructure and connectivity for each bespoke proof of concept testing environment. Connexus Labs enables development teams to connect trading applications to sources of market data, allow messaging applications to initiate private wire calls and build product architectures that link to external cloud platforms.



- Development teams can utilize the comprehensive array of published APIs supporting full integration with IPC products & services.
- Access to IPC's global financial ecosystem enables Connexus Labs projects to evolve into live customer Beta Trials without any additional infrastructure.
- Ability to connect to public, private and hybrid cloud platforms globally supporting product life cycle management.



Advanced Tools, Integrations and Market-Leading Partnerships

IPC offers several advanced tools, integrations and market-leading partnerships to enable all mission-critical trading communications for the global financial markets. This includes:

APIs and Tools

This includes the **Blue Wave** Development Platform, where firms have the ability to quickly and cost-effectively develop new applications to:

Meet regulatory requirements
Streamline manual processes
Address customer service challenges
Improve workflow efficiency

IPC



The Blue Wave Development Platform gives enterprises access to APIs and a Software Development Kit to develop their own business-specific applications. Clients can create the applications they want, when they want them, with the option of using their own technology team, IPC's expertise or an external technology partner.

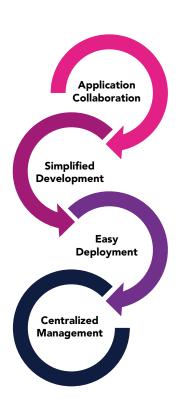


- IPC's Real-Time Audio Gateway allows NLP engines to consume real-time high-definition audio and digitize voice, enabling a range of use cases for the trade lifecycle workflow from front office to back office and compliance
- Connexus Voice Open APIs enable the creation of dynamic counterparty conversations through third-party applications, enterprise collaboration tools and chat systems
- For example, IPC can interoperate with Microsoft **Teams** through our Unigy platform or via the open APIs on the Connexus Cloud financial ecosystem

IPC Agility

Allows enterprises to benefit from quicker adoption of new technologies whether on-premise as part of our Connexus Uniqy private cloud SaaS service, or in hybrid models. It is a transformational solution that works in concert with Unigy & Connexus Cloud. IPC Agility is an application platform for tools and applications developed by IPC, partners, or customers. This facilitates digital transformation in high- and low-touch trading, accelerates innovation and technology adoption, empowers interoperability and complex collaboration, and creates efficiency at scale in a rapidly evolving market. IPC is leveraging IPC Agility in a number of areas to speed up the pace of development and adoption. This includes advanced analytics, CRM integration, partner solutions and technologies such as AI, NLP and transcription as well as the Uniqy Soft Client.

IPC Agility is the direct result of IPC's continued "API First" vision and open-platform philosophy in building products that drive efficiencies and enable new paradigms. Development teams will be empowered to work in parallel across containerized applications, reducing costs and shortening the application development and deployment life cycles.



Partnerships

Our strategic growth partners are some of the most well-known firms across the globe, innovatively working to enhance IPC's world-class cloud platform. Through these relationships, our partners and customers have the opportunity to gain access to an extensive portfolio of cutting-edge technologies and solutions. Our strategic partner ecosystem includes OpenFin, NICE, Verint, RedBox, GreenKey Technologies, tekVizion, Beeks, TDS and Tenfold.



















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